

GAMING MACHINE HAVING DISPLAY WITH SENSORY FEEDBACK

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation in part of PCT Application Serial No. US2006/034830, filed Sep. 7, 2006, and titled "Gaming Machine Having Display with Sensory Feedback," which claims priority from U.S. Provisional Application No. 60/715,237, filed on Sep. 8, 2005, each of which is hereby incorporated by reference in its entirety and from which priority is claimed.

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FIELD OF THE INVENTION

[0003] The present concepts relate generally to gaming machines and methods for playing wagering games, and more particularly, to gaming systems and methods having a display adapted, at least in part, to provide sensory feedback to a user interacting with the display.

BACKGROUND OF THE INVENTION

[0004] Gaming machines, such as slot machines, video poker machines and the like, have been a cornerstone of the gaming industry for several years. Generally, the popularity of such machines with players is dependent on the likelihood (or perceived likelihood) of winning money at the machine and the intrinsic entertainment value of the machine relative to other available gaming options. Where the available gaming options include a number of competing machines and the expectation of winning at each machine is roughly the same (or believed to be the same), players are likely to be attracted to the most entertaining and exciting machines. Shrewd operators consequently strive to employ the most entertaining and exciting machines, features, and enhancements available because such machines attract frequent play and hence increase profitability to the operator. Therefore, there is a continuing need for gaming machine manufacturers to continuously develop new games and improved gaming enhancements that will attract frequent play through enhanced entertainment value to the player.

[0005] One concept that has been successfully employed to enhance the entertainment value of a game is the concept of a "secondary" or "bonus" game that may be played in conjunction with a "basic" game. The bonus game may comprise any type of game, either similar to or completely different from the basic game, which is entered upon the occurrence of a selected event or outcome in the basic game. Generally, bonus games provide a greater expectation of winning than the basic game and may also be accompanied with more attractive or unusual video displays and/or audio. Bonus games may additionally award players with "progressive jackpot" awards that are funded, at least in part, by a percentage of coin-in from the gaming machine or a plurality of participating gaming machines. Because the bonus game concept offers tremendous advantages in player appeal and excitement relative to

other known games, and because such games are attractive to both players and operators, there is a continuing need to develop gaming machines with new types of bonus games to satisfy the demands of players and operators.

[0006] However, gaming machine displays have conventionally been used as a purely visual display and, most recently, as data input devices with the advent of touch screen technology. Therefore, opportunity exists to improve upon this display interface to further enhance the interaction between the gaming machine and the user and, consequently, to improve the gaming machine's entertainment value.

SUMMARY OF THE INVENTION

[0007] In one aspect of the present concepts, a method of conducting a wagering game on a gaming machine includes the steps of displaying a selectable game element on a display and associating each potential outcome associated with the selectable game element with a predetermined haptic output selected from a plurality of predetermined haptic device outputs. The method also includes the steps of selecting the selectable game element to reveal an outcome associated therewith and causing a haptic device to output the predetermined haptic output corresponding to the outcome of the selectable game element.

[0008] In yet another aspect of the present concepts, a gaming machine for conducting a wagering game comprises a display and a haptic device connected to a gaming machine input device, the input device being configured to receive a user input. The gaming machine also includes a controller coupled to the display and the haptic device configured, upon execution of associated instructions, to display randomly selected outcomes on the display, display at least one user-selectable game element on the display, and activate the haptic device in response to a user selection of the at least one user-selectable game element.

[0009] In another aspect of the present concepts, a wagering game for a gaming machine is provided, the wagering game comprising an instruction set configured, upon processing by a processor, to perform various acts. The acts include defining a plurality of potential random outcomes of the wagering game and associating each potential random outcome with one of a plurality of output signals to a haptic device. The acts also include outputting an output signal to the haptic device corresponding to an outcome of a selected game element and activating the haptic device in response to the output signal.

[0010] In another aspect of the wagering game for a gaming machine noted above, the wagering game can comprise an instruction set configured, upon processing by a processor, to further perform acts comprising defining a plurality of potential random outcomes of the wagering game, associating each potential random outcome with one of a plurality of output signals to a haptic device, outputting an output signal to the haptic device corresponding to an outcome of a selected game element, and activating the haptic device in response to the output signal.

[0011] In still another aspect of the wagering game for a gaming machine noted above, the wagering game can comprise an instruction set configured, upon processing by a processor, to further perform acts comprising displaying on a display a user-selectable element and a user-selectable game element and outputting the output signal to the haptic device